

# Recordings at Risk

Proposal

Submitted by the Council on Library and Information Resources

to

The Andrew W. Mellon Foundation

July 28, 2016

## Summary

The Council on Library and Information Resources (CLIR) seeks support for a three-and-a-half year regranting program in support of the preservation of rare and unique audio and audiovisual content. In keeping with CLIR's mission and with the goals of its established *Digitizing Hidden Collections* program, *Recordings at Risk* would also focus on the preservation reformatting of audio and audiovisual content of high value to scholars.

## Background

Audio and audiovisual recordings document vital, irreplaceable aspects of twentieth and twenty-first century life, but substantial proportions of this legacy will be lost due to the fragility and obsolescence of audio and audiovisual media. For the past decade, CLIR has helped to raise awareness about this threat through publications. A [series of studies conducted in partnership with the National Recording Preservation Board of the Library of Congress](#)<sup>1</sup> have addressed both the legal and practical challenges affecting the preservation of audio content. These studies have shown that broadening professional awareness of these challenges, setting clear priorities for action, and making substantial investments in proper conservation and reformatting techniques will be necessary to ensure this content will be available to future generations.

Another CLIR publication, [The Survival of American Silent Feature Films: 1912-1929](#) (2013),<sup>2</sup> serves as a sobering cautionary tale for custodians of moving image collections. In less than a century, all but 14% of our earliest moving image history has disappeared.<sup>3</sup> Twentieth-century video collections could face a similar fate. The variety of materials employed by manufacturers of magnetic videotape have diverging implications for the playable lifespan of that tape. Experts' estimates of this lifespan range from ten to sixty years; the earliest magnetic videotapes are now sixty years old. Standards in playback technologies have evolved rapidly over this period; many playback machines are no longer being manufactured or serviced. For these reasons, archivists caring for video collections can face the challenge of describing images they cannot see, without the proper training to appreciate the length of time the formats in their collections may be expected to "last."<sup>4</sup>

---

<sup>1</sup> <https://www.loc.gov/programs/national-recording-preservation-board/preservation-study/>

<sup>2</sup> <http://www.clir.org/pubs/reports/pub158>

<sup>3</sup> The "Cost of Inaction Calculator" designed by AVPreserve effectively conveys in economic terms the urgency of acting to preserve time-based media within cultural heritage institutions: <https://coi.avpreserve.com>.

<sup>4</sup> For details, see the "Videotape Preservation Fact Sheets" prepared by the Association of Moving Image Archivists: [http://www.amianet.org/sites/all/files/fact\\_sheets\\_0.pdf](http://www.amianet.org/sites/all/files/fact_sheets_0.pdf).

If the current generation of professionals fails to act, vast quantities of both audio and audiovisual content will remain poorly understood, and will ultimately be lost. Proper storage and handling can prolong the life of fragile recordings, but these practices serve as mere stopgaps, postponing inevitable decay. Even in cases where media have been preserved, changes in formats and playback technologies over time will render them unusable. Digital reformatting is currently the best available solution for ensuring the survival and utility of recorded content in fragile, obsolete cylinders, discs, and magnetic tapes. Identifying top priorities for digitization of rare and unique recordings, as well as setting appropriate standards for the preservation of audio and audiovisual content in digital form, are therefore of paramount importance for the current generation of cultural and information workers.

Building upon CLIR's previous work with the National Recording Preservation Board, CLIR's work with the Foundation on the *Cataloging and Digitizing Hidden Collections* regranting programs, and the Foundation's recent partnership with the Northeast Document Conservation Center (NEDCC) to strengthen capacity in the audio preservation marketplace, CLIR proposes to create a three-and-a-half-year regranting program focused on the preservation of rare and unique audio and audiovisual materials. In consideration of the urgent need to focus national attention on the looming loss of our audio and audiovisual heritage, CLIR proposes to establish this new program rapidly and develop it iteratively. By offering relatively small grants to a wide range of collecting institutions serving scholars, students, and the public, CLIR will encourage professionals working in a variety of contexts to identify institutional priorities for digital reformatting, to establish good working relationships with partners who will help them undertake this work responsibly and efficiently, and to raise awareness of best practices for the description, storage, and maintenance of digitized audio and audiovisual content.

CLIR proposes to rely upon the assistance of NEDCC in the initial months of the project. As experts in conservation and preservation with current plans to develop and sustain a new audio preservation service, NEDCC staff can assist CLIR with establishing appropriate technical and budgetary guidelines for applicants.

## **Rationale**

The 2014 *NEDCC Sound Preservation Study Report* [See **Appendix D**] found that 46% of survey respondents cited a "lack of funds" as their primary obstacle to audio digitization. Similarly, high costs are a major barrier for the preservation of audiovisual content. Exacerbating factors that discourage archivists and curators from focusing attention on reformatting include a general lack of education and training related to the care and use of time-based media,<sup>5</sup> as well as a lack of proper playback equipment and storage facilities at a high proportion of cultural institutions. By offering a temporary boost over financial hurdles, CLIR hopes to encourage grant applicants to find ways to surmount these additional barriers themselves. In addition, preparing applications and receiving advice from qualified reviewers should prove a valuable – and much needed – educational opportunity for all respondents to the program's calls.

---

<sup>5</sup> A 2015 entry on the AVPreserve weblog illustrates this point: <https://www.avpreserve.com/blog/your-inaccessible-undocumented-collection-is-not-used-therefore-has-no-value/>

Through *Cataloging Hidden Special Collections and Archives* (2008-2014) and *Digitizing Hidden Special Collections and Archives* (2015-present), CLIR has awarded 147 grants to cultural heritage institutions across the United States with the generous support of the Foundation. CLIR has been responsible for the design and operation of the application and competitive review processes for both programs, in addition to handling management and reporting tasks required for guaranteeing the Foundation's investments fulfill program goals. The overall aims and constituent base for the current *Digitizing Hidden Special Collections and Archives* initiative overlap with the purposes and clientele the *Recordings at Risk* program is designed to serve, so CLIR staff are already familiar with the general issues that are important to consider in planning successful digitization projects, as well as with the factors that would make particular collections high priorities for serving scholarly interests.

While experience with *Digitizing Hidden Collections* has given CLIR the capacity to envision a general framework for a new regranting program, it is important to recognize and articulate key differences between the current program and the program proposed here. These include the new program's exclusive focus on audio and audiovisual materials, its concern with the preservation of content "at risk," and its emphasis on the facilitation of smaller, discrete projects that will enable a wide variety of institutions to participate. CLIR recommends a concentration on smaller, shorter grants (\$10,000-\$50,000 in its open calls; three to twelve months) for several reasons. First, this lower funding level will make it easy for potential applicants to decide which CLIR program is best suited to their needs; second, the vast majority of cultural heritage institutions have small groups of audio and audiovisual materials within larger mixed collections, even if they do not accession large audio or audiovisual collections as a rule; and third, fewer national funding programs concentrate support for digital reformatting at this level.<sup>6</sup> NEDCC staff have confirmed that digitization service providers regularly handle projects within this range.

These distinctions will bring with them new challenges for CLIR. Best practices related to audio and audiovisual preservation reformatting have been rapidly evolving in recent years, and some aspects of collections assessment, handling, digitization, metadata production, and digital preservation work involved are highly technical. Legal and ethical issues related to copying and providing access to sound and video recordings are often challenging for scholarly and information professionals to understand, as are many aspects of the technologies available for providing secure access to recorded information online. It is important that CLIR seek the help of outside experts in order to develop and interpret appropriate guidelines for the assessment of applications.

CLIR proposes to undertake this development in the context of a first, "pilot" call for proposals in partnership with NEDCC, specifically focused on the preservation reformatting of magnetic audio media. This will afford an opportunity to bring a panel of experts together to assess a smaller number of proposals developed for NEDCC's new preservation service for magnetic audio recordings. CLIR staff will travel to NEDCC at the beginning of the project to tour the facilities, to learn about the new audio preservation reformatting service, and to discuss details of

---

<sup>6</sup> CLIR staff have confirmed with Program Officer Jesse Johnston at the National Endowment for the Humanities that based upon their experience with funding audio and audiovisual digitization, a program offering smaller grants would meet important needs in a wide range of institutions.

the pilot competition. NEDCC would assist with marketing the pilot call and advising applicants, working closely with CLIR staff during these activities. The pilot review process will be handled independently by CLIR and the program panelists. Awards granted from the pilot call would help NEDCC build a clientele for the new service that the Foundation has helped them create. NEDCC expects to launch this service in 2016, so the timing of the pilot call will help them secure enough work to begin operating efficiently and productively.

Following the pilot call, CLIR plans to incorporate feedback from program panelists into the first in a series of three open competitions for audio and audiovisual preservation reformatting awards. Because awareness of the program will build over time and unsuccessful applicants will revise and improve proposals after receiving feedback, the panel will award progressively larger amounts over the series of competitions. The four calls and subsequent grants management and assessment activities will comprise three and one-half years (forty-two months).

## **Project Description**

The major activities of the *Recordings at Risk* program will proceed as follows:

October – December 2016: Staffing and pilot program design  
January – April 2017: Pilot call in partnership with NEDCC, to award \$150,000  
April – May 2017: Application and review criteria revised for 1st open application call  
June – October 2017: 1st open application call, to award \$500,000  
November 2017: Application and review criteria revised for 2nd open application call  
December 2017 – April 2018: 2nd open application call, to award \$750,000  
April 2018: Application and review criteria revised for 3rd open application call  
May – September 2018: 3rd open application call, to award \$900,000  
October 2018 – December 2019: Grant management  
January – March 2020: Program assessment  
June 2020: Final report submitted to the Foundation

### *Review criteria*

Scholarly significance and the urgency of need for preservation reformatting will be the primary criteria for the assessment of proposals for *Recordings at Risk*. Guidance for how to make convincing cases for scholarly significance and urgency of need will be provided to applicants in the program guidelines for the “Scholarly Value and Significance” and “Risk Assessment” components of the application, detailed below. CLIR will rely upon the advice of review panelists in the development and improvement of this language. Additional criteria will include: commitment to sustainability (including long-term discoverability), technical competency of applicant and service provider, cost-effectiveness, and the suitability of the systems and policies that will enable access to digitized content. Applicants will be required to have samples of the nominated materials examined by a qualified expert prior to applying to the program, to ensure the condition of the materials is sufficiently well understood to support an accurate estimate of costs.<sup>7</sup> Applicants who have completed full collection- or item-level assessments prior to

---

<sup>7</sup> Bill Veillette of the NEDCC advises us that an “examination” implies a routine physical inspection of materials by an expert during the course of preparing an estimate, whereas an “assessment” implies a formal evaluation to give

applying will be given an opportunity to append summary documentation of those assessments as evidence of their commitment to the long-term care of the materials. All applicants will be required to explain how their proposed activities comply with copyright law and not infringe on third-party rights.

### *Eligibility*

#### Pilot program

All prospective applicants to the pilot program will first solicit confirmation from NEDCC that their proposed audio reformatting project merits NEDCC's "high-touch/high-quality" technical approach. Applicants that meet NEDCC's criteria will be advised that they may apply for funding through CLIR's pilot program if they meet the following requirements:

- a. eligible applicants must be U.S. nonprofit academic, research, or cultural organizations;
- b. applicants must submit only one application per institution;
- c. applicants may request as little as \$5,000 or as much as \$25,000 per project;
- d. the grant may fund up to 100% of the direct costs of audio reformatting services to be provided by NEDCC;
- e. applicants must demonstrate a commitment to the long-term preservation of the digital files created through the project;
- f. applicants must agree to create appropriate descriptive and technical metadata for all content digitized through grant funds, and to dedicate this metadata to the public domain;
- g. applicants must explain the legal justification for their proposed activities and all legal and ethical constraints affecting potential access to and reuse of digitized content, and they must detail the terms and conditions under which access will be provided for the purposes of research.

#### Open calls

Applicants responding to one of the program's open calls must meet the following requirements:

- a. eligible applicants must be U.S. nonprofit academic, research, or cultural organizations;
- b. applicants must submit only one application per institution;
- c. applicants may request as little as \$10,000 or as much as \$50,000 per project;
- d. the grant may fund up to 100% of the direct costs of audio preservation reformatting services provided by a named provider, as well as a limited amount of directly related institutional costs associated with the storage, preservation, and provision of access to reformatted content, at the discretion of CLIR's panel;
- e. applicants must demonstrate a commitment to the long-term preservation of the digital files created through the project;
- f. applicants must agree to create appropriate descriptive and technical metadata for all content digitized through grant funds, and to dedicate this metadata to the public domain; and
- g. applicants must explain the legal justification for their proposed activities all legal and ethical constraints affecting potential access to and reuse of digitized content,

---

recommendations for housing and storage. A full assessment of a collection by an outside vendor can take three to six months to schedule and complete and can cost \$5,000-\$15,000.

and they must detail the terms and conditions under which access will be provided for the purposes of research.

Because the purpose of the program is for the preservation of materials that are most likely under copyright, program guidelines will not require applicants to provide access to digitized content openly. For many grant recipients, access will be limited to on-site use or require authentication through a secure media network. Rather than exercising a preference for proposals nominating materials that can be made openly available, reviewers will be instructed to evaluate whether the proposed terms for providing access are reasonable given the nature of the content nominated for digitization and the legal justification given by the applicant.

Some applicants may require only partial funding. Applicants will be allowed to request less than 100% of the costs of a proposal if they wish, indicating that the balance of costs will be covered by institutional funds, donor contributions, a Kickstarter campaign, or another source. In other cases, support for closely related activities may be required. CLIR expects that some applicants will need funds for basic metadata creation, on-site storage, quality checks of files received from service providers, and software, services, and labor related to the ingest of files and metadata into preservation and access systems. Support for these activities will be allowable so long as they are deemed reasonable and necessary by reviewers. However, support for collection assessment, conservation, cataloging original materials, detailed indexing, transcription, translation, outreach, or web development for access systems will be disallowed.

Unsuccessful applicants will be allowed to reapply in any subsequent round; successful applicants may apply for support for another project in a subsequent round, with the understanding that awards are competitive and those who have not yet received a grant will have a preference in case of a tie on the merits.

#### *Application process*

CLIR will use its application system platform to manage application, review and reporting activities for both the pilot initiative and the three open calls. Following the pilot initiative, the application design and guidelines will be assessed and expanded where necessary to accommodate the technical requirements of a full range of audio and audiovisual reformatting projects.

The application will consist of the following components:

- *[for the pilot program only] Cover sheet:* A cover sheet signed by an NEDCC representative will serve as confirmation that the applicant has NEDCC's "approval" to apply for the pilot grant.
- *[for the open call] Cover sheet:* This sheet will be adapted from the Foundation's [template for a proposal information sheet](https://mellon.org/media/filer_public/59/7e/597e096c-73c7-4d9b-8bfa-8fe474aaf38a/proposalinformationsheet100614.docx).<sup>8</sup>
- *Applicant information:* The project's main contact name and details, as well as identifying information about the applicant institution.

---

<sup>8</sup> [https://mellon.org/media/filer\\_public/59/7e/597e096c-73c7-4d9b-8bfa-8fe474aaf38a/proposalinformationsheet100614.docx](https://mellon.org/media/filer_public/59/7e/597e096c-73c7-4d9b-8bfa-8fe474aaf38a/proposalinformationsheet100614.docx)

- *Project summary*: a brief description of the proposal, to be used for reference in review and in any public documentation of the program on CLIR's website.
- *Description of nominated materials*: A more detailed description of the quantity and extent of materials to be digitized, including an accurate account of their provenance, arrangement, level of available description, current storage and housing, physical condition, accessibility for public use, intellectual property status, and any other legal or ethical considerations affecting access or re-use.
- *Scholarly value and significance*: This will be a narrative describing the potential impact of the project upon scholarship. In addition to the applicant's narrative, CLIR will require one, and accept up to three, letters from scholars familiar with the materials' content in support of the project.
- *Risk assessment*: This section will afford applicants with an opportunity to explain the urgency of their proposed project in terms of the risk of loss of recorded information on audio or audiovisual carrier. Here, applicants will be asked to explain why the proposed materials merit the particular approach to be taken by the vendor or organization chosen to undertake the work.
- *Project plan*: This section will include a timeline of proposed activities, a description of the technical approach to be employed for the preservation reformatting, metadata creation, and digital preservation activities to be undertaken during the project term.
- *Deliverables, Access, and Impact*: Applicants will describe all project deliverables and articulate their strategy for project-related outreach to scholars, professionals, and the public once the materials have been digitized. They will explain the means through which the content can be made available for study and re-use, their plans for connecting the content to related collections held elsewhere in their own and at other institutions, and any planned or potential future initiatives to be built upon this investment.
- *Digital preservation plan*: Applicants will be asked to describe the processes and parties responsible preserving the files created during the project, and how preservation activities will be managed over time.
- *Rights, ethics, and re-use statement*: Applicants will summarize all known rights, embargoes, and ethical or legal considerations relevant to their nominated collections and describe how this information will be communicated to users. They will explain the basis upon which the proposed activities are justifiably legal and ethical. For example, they should explain how their project fits within the protections afforded collecting institutions under Section 108 of Title 17 of the *United States Code*, or whether they will rely on fair use or permissions in any defense of their work. If personally or culturally sensitive information is present within nominated recordings, they will describe how they will uphold ethical and moral claims and the rights of interested individuals or communities. Applicants must confirm they will assert no new rights or introduce no restrictions except those already required by law and existing agreements pertaining to the original materials.
- *Letter of institutional support*: Applicants will be asked to provide a letter from a head administrator affirming the institution's support for the project, its readiness to undertake the outreach and preservation activities described in the proposal, and its recognition of the project's fulfillment of the institution's mission and current strategic goals. The letter must reaffirm the specific conditions under which the digital content created through the project will be preserved for the long term and made available for study and re-use,

including the institution's commitment to assert no new rights or introduce no restrictions except those already required by law and existing agreements.

- *Budget and budget justification*: This will provide reviewers with a complete list of costs to be funded through the grant and a justification for each cost on a line-by-line basis. Applicants to the pilot program must explain why the NEDCC is the appropriate service provider for the proposed project; applicants responding to the open call must explain the criteria and process used to select the vendor to undertake the project. Program guidelines will advise applicants that they should select vendors who can provide strong references and reasonable prices as well as the most appropriate technical approaches and levels of quality control for their specific circumstances.
- *Budget appendices*: Applicants to the pilot program will append a proposal from NEDCC that supports their proposed budget and justification; applicants responding to the open call must include detailed written estimates from at least two service providers, including the estimate from the provider the applicant has chosen to undertake project work.
- *Additional appendices (optional)*: These would include summary documentation of collection assessments, relevant accession documentation, donor agreements, photographs of the nominated collections, sample metadata records, etc., but may not include additional letters of support.

#### *Review process*

As indicated above, those interested in applying to the initial pilot program must first confer with staff at NEDCC to determine the suitability of their project for the NEDCC audio preservation service and for funding through CLIR. Once NEDCC has performed its initial evaluation, it will recommend only those it considers a good fit for its new audio reformatting service for a full review by CLIR. Thus all proposals will come “pre-evaluated” in terms of their suitability for digitization through NEDCC's new service. CLIR will then undertake a full scholarly and technical review of those proposals using a standing panel of ten experts, five of whom will provide assessments of scholarly value, and five of whom will assess cost effectiveness and technical competence.

The program will not be restricted to a particular scholarly domain, so CLIR will seek panelists with scholarly expertise in a range of domains within which documentary evidence stored on audio or audiovisual media is relevant (communications, music, performing arts, anthropology, linguistics, American studies, cultural studies, etc.), as well as technologists with expertise in digitization and digital preservation for a range of audio and audiovisual media types. The panel will meet in person after reviewing pilot applications to determine recommendations for awards and to help CLIR flesh out procedures and guidelines that will ensure a smooth implementation of the open call.

Prior to assigning applications to reviewers, CLIR staff will review all proposals for eligibility and compliance with program guidelines. Any proposals deemed ineligible or non-compliant will not be sent to reviewers. For both the pilot and open calls, applications will be reviewed and scored by individual panelists using the WizeHive system, but final determinations about funding will be made by consensus in the course of conversations led by CLIR staff. Panelists will meet in person in Washington, DC during the pilot and first open competitions; following the second and third open competitions, the review panel will convene online.

### *Assessment of project grants*

Final reports will be required from all grant recipients and will be reviewed by CLIR staff as they are submitted to ensure compliance with program requirements. Project reports will be structured to include the same components as CLIR's reports to the Foundation, as relevant (see **Reporting to the Foundation**, below). Final reports from recipients will summarize the project's purpose and impact to date, including all activities undertaken to preserve project content and make it accessible to the public according to the commitments outlined in their grant applications. Reports will also document any uses of project content by members of the public during the reporting period. CLIR anticipates all final narrative reports will be received from grantees by the end of December 2019. During the grant's final period, from January to March 2020, CLIR will conduct an overall assessment of the program's impact on the grant recipients and, insofar as possible, their community of users.

### **Outcomes and Benefits**

The major outcome of the proposed program will be the preservation of large quantities of significant audio and audiovisual content which might otherwise be lost. An additional major benefit is raising awareness of the urgency of preserving this content among the cultural heritage communities; through their efforts to apply to this program, many who have delayed dealing with audio and audiovisual formats due to lack of expertise or funding will be prompted to set institutional priorities in this area. The relatively small projects supported by this program are similar in scale to what institutional or local funding programs or donors might also support. As we have seen happen with former Hidden Collections applicants and recipients, the recognition given to the managers of one successful grant, or even one unsuccessful but well reviewed application, often leads motivated professionals to other sources of funding.

Additional benefits will accrue to participants in *Recordings at Risk* as CLIR promotes their work and includes them in conversations taking place within the Hidden Collections program. Recipients of all CLIR digitization and preservation reformatting grants will be invited to participate in future program webinars and CLIR receptions. Program staff will share news of recipients' work through CLIR's web log, social media accounts, and newsletter. Staff will also take opportunities to connect recipients facing similar challenges or working with similar collections with one another. In former years, such introductions have led to jointly planned panels, workshops, or discussions at conferences. Finally, cost data gleaned from proposals and reports for this program will, along with data gathered through Digitizing Hidden Collections, help CLIR better understand the scale of the financial challenge facing the custodians of fragile audio and audiovisual media.

### **Intellectual Property**

CLIR will align program guidelines to conform to Foundation grantmaking policies<sup>9</sup> and practices as closely as possible, so will rely on Foundation officers for advice as these guidelines

---

<sup>9</sup> <https://mellon.org/grants/grantmaking-policies-and-guidelines/grantmaking-policies/>

are drafted and finalized. The Foundation's advice will be particularly beneficial in establishing appropriate intellectual property policies.

*Recordings at Risk* will involve the preservation reformatting of intellectual property belonging to parties other than grant recipients and in some cases subject to restrictive terms in donor agreements. Section 108 of Title 17 of the *United States Code*<sup>10</sup> permits collecting institutions to engage in digitization activities for the purpose of preservation; however, in many cases it will not be legally permissible for grant recipients to provide access to digitized content openly through an institutional website. For this reason, applicants will not be required to make content created through this program openly accessible, but will instead be asked to explain and justify the terms and conditions under which they will be able to make content accessible for the purposes of research. Reviewers will assess applicants' understanding of the legal and ethical issues affecting the provision of access to nominated content, as well as the appropriateness of the chosen methods and policies for providing access given legal and ethical limitations. The only requirement of grant recipients is that they impose no restrictions upon access to digitized content other than those that already apply to the original materials.

---

<sup>10</sup> <http://www.copyright.gov/title17/92chap1.html#108>

## Appendix

*Excerpt from final report on “NEDCC Audio Preservation Planning” (Ref. No. 41300602), dated 3/20/2015, p. 4, which explains potential challenges to starting an audio preservation service.*

Our research, however, revealed some interesting findings, which present (manageable) challenges to ramping up an audio preservation service. These are:

- **Trust.** We had anticipated that NEDCC would have a material advantage over its prospective for-profit competitors in terms of trustworthiness, given that nonprofits are mission-oriented rather than profit-oriented. While NEDCC is highly trusted, it turns out that clients also trust (almost unconditionally) any for-profit vendor that has been in business for a reasonable length of time. For example, the focus group nodded in agreement with the statement by one participant, “I assume if they are still in business they must know what they are doing.”
- **Education.** We knew that many—if not most—archivists who find themselves caring for audio collections feel that their knowledge of audio preservation is inadequate to the demands of their stewardship responsibilities. But, we were surprised to learn that their anxiety doesn’t always translate into caution. For example, when purchasing vendor services, all of the focus group participants assumed they were getting 1:1 transfers with 100% QC (whereas they are typically getting up to 1:12 transfers with 0% QC). This poses a challenge for NEDCC to educate institutions to not only read proposals carefully before signing them, but to ask questions that would allow them to understand exactly what they are buying.
- **Price.** Because existing vendors have adopted high-throughput workflows, market prices for audio preservation services have now dropped below the cost of providing a “specialized workflow.” This would not normally be a problem with an educated/experienced client base, but, as indicated above, archivists will likely be tempted by low prices, and then learn from experience when to use a high-throughput vs. specialized vendor depending on the physical and intellectual characteristics of their collections.
- **Funding.** Forty-six percent of survey respondents cited a lack of funds as their primary obstacle to audio digitization. This is nearly twice the percentage of NEDCC’s current conservation and imaging clients who require a grant or donation to proceed with work (i.e., only 25% of existing clients need outside funding).

Although we were prudent in our financial projections for the costs of starting up an audio service, there is the risk that it could take longer than expected to build a sufficient backlog to achieve a breakeven level of production. This risk could be aggravated by the education, funding, and pricing issues explained above. The challenge will be to aggressively market the new audio services and take other measures to “prime the pump” to ensure we not only get off to a good start, but achieve full stride within a reasonable period of time.